

# **AUTOMATICALLY EXTRACTING GRAPHICAL BAR CODES**

## **ABSTRACT**

Systems and methods for automatically extracting a graphical bar code (i.e., an image that contains inconspicuous graphical modulations that encode embedded information) are described. In accordance with this automatic extraction scheme, a graphical bar code may be isolated from a composite image in a way that preserves the information-containing graphical modulations encoding the embedded information and avoids corrupting artifacts, such as markings contained in the composite image. The resulting extracted graphical bar code readily may be processed into a format that is tailored to the requirements of a decoding system that may be particularly sensitive to noise, such as extraneous markings and image corruption. In addition, this automatic extraction scheme robustly handles missed and incorrect detections.